A COHORT DEMOGRAPHIC MODEL OF CAREER MOBILITY IN ORGANIZATIONS

Shin Eui-Hang & Jun Kwang-Hee

Utilizing the basic mathematical techniques of the life table, this paper formulates a cohort demographic model of career mobility in bureaucratic organizations. The model focuses upon the derivations of the effects of size and location of a particular entry cohort relative to the sizes of preceding and succeeding cohorts, the effects of intra-and inter-cohort competitions and the "compensatory effects" of a cohort on its career mobility. A new measurement precedure of the seniority status of a cohort which takes into account the cumulative career history of the cohort is developed. Also, the structural sources of position vacancies in bureaucratic organizations are discussed.

Introduction

Previous studies (Mannheim, 1928; Ortega, 1933; Ryder, 1965; Carlsson and Karlson, 1970; Glenn, 1977; Reed, 1978; Duncan and Winsborough, 1984) have emphasized the importance of cohort analysis as a methodological technique in the study of social phenomena. Ryder (1965:858) indicates that "the cohort record, as macro-biography, is the aggregate analogue of the individual life history," and thus it provides the essential "temporal isomorphism" for the investigation of the processes of social change from the social structural perspectives. Reed (1978:406) notes that the cohort composition of society has a direct bearing on the conditions for social change and that major social structural transformations have frequently been associated with the unique conditions and problems facing particular cohorts.

Using the theoretical framework of "long swings" (Kuznets, 1958); Thomas and Eldridge, 1964) as a guideline, Easterlin (1961; 1968; 1978; 1980) has developed the relative cohort size model. Easterlin (1978:404) asserts that "a cohort carries its fortune, good or bad, depending on its size, through its life cycle" and "as a scarce cohort ages, it carries with it relatively favorable wage and employment conditions." The relative cohort size model has been applied to the empirical study of such sociodemographic topics as fertility (Easterlin, 1966; Easterlin, 1978), earnings (Welch, 1979; Smith and Welch, 1981), divorce rate (Carlson, 1980), and suicide rate (O'Connell, 1978; Ahlburg and Shapiro, 1984). Most of these studies focused on the experiences of three major birth cohorts: the "good times cohorts" born during the relatively low fertility period of 1920s, the "baby boom cohorts" born in the 1940s and 1950s, and the "baby bust cohorts" born in the 1960s and 1970s.

In addition to applications of the relative cohort size model in demographic research, there has been increasing utilization of the model in the sociological studies of career mobility in complex organizations (Ryder, 1965; Reed, 1978; Konda and Stewman, 1980; Grandjean, 1981: Tapperman, 1975; Hannan and Freeman, 1977; Hernes, 1977). In particular, from the analysis of the data on promotion rates of the foreign service officers in the U.S. Department of State, Reed (1978:404) observed that "the distribution of organizational rewards, as reflected rate of promotion for organizational members, is influenced by the relative sizes and placement of cohorts." Also, Grandjean (1981)

presents a perspective of organizational demography which argues that "success is a matter of being in the right place at the right time (1061-1062)." By analyzing the carrers of successive entry cohorts of U.S. civil servants, Granjean (1981) has investigated important organizational and historical effects on the opporunity structure of career mobility. It should be noted that these students of organizational demography (Ryder, 1985; Reed, 1978; Grandjean, 1981; Tapperman, 1985; Hannan and Freeman, 1977) have adopted the Mills' (1959:3) notion that the individual's career mobility is at the intersection of societal history and individual biography.

Over the last two decades the sociology of career mobility has been based on the status-attainment model (Blau and Duncan, 1967; Featherman and Hauser, 1978; Hauser and Featherman, 1977). However, the status-attainment model tends "to ingore the structure and operations of formal organizations, the labor market context within which the career outcomes of individuals are most commonly determined (Grandjean, 1981:1058)." Coser (1975:694) also criticises the model by indicating that "there is no concern with the ways in which... social advantage operate in predictable ways... to shape social structure and to create differential life chances."

On the whole, it is belived that the relative cohort size model has alleviated the shortcomings of the status-attainment model of the organizational career mobility. Furthermore, the model is an effective analytical procedure which elucidates the contextual implications of environments relevant to organizational opportunities and political economy. The relative cohort size model of career mobility which has been developed heretofore, however, lacks standardized measurement procedures for such key variables as "relative cohort size," "cohort location," and "seniority."

Purpose of the Study

The primary purpose of the study is to formalize a set of important theoretical propositions which have been used in the previous studies on career mobility in organizations. More specifically, first, by using life table techniques this study will develop a standardized procedure for measuring the seniority status of a cohort. Second, the paper presents a methodology for analyzing the effect of the relative size and location of a cohort in relation to preceding and succeeding cohorts. Third, we will discuss the structural sources of vacancies in positions and the allocation procedures of the vacancies. Finally, the possible "compensatory effect" of the unique experience of a cohort on its subequent career mobility will be considered.

The Model

In constructing a cohort demographic model of organizational career mobility we have considered the following four theoretical postulates on important determinants of the mobility rate:

Postulate 1. The sizes of cohorts in a bureaucratic organization at a given point in time may vary due to the fluctuations in the organizational reproduction (i.e., variations in cohort size at the time of entry) and intercohort variations in attrition. The fluctuations in the sizes of entering cohorts are associated largely with changes in organizational labor demand and availability of persons for the vacancies.

Postulate 2. A primary concern of bureaucratic organizations with their internal hierarchy may be the preservation of "law and order" in career mobility within a given system structure (Abrahamson, 1979; Grandjean, 1975; Parsons, 1940). From

such an "organizational system maintenance" perspective, the seniority status of a cohort and its component individuals would be a major criterion for selecting personnel for promotion (Reed, 1978; Konda and Stewman, 1980, 1981; Konda, et al., 1981).

Postulate 3. The promotion chances for an entry cohort and its members at a particular grade position are determined by cohort demographic composition at that position: the larger the size of a cohort in the same grade position within a bureaucratic organization, the greater the intracohort competitions for promotion (Keyfitz, 1973, 1977, 1980; Turner, 1960).

Postulate 4. The size of a particular cohort relative to the sizes of preceding and succeeding cohorts is an important determinant of organizational career mobility for that cohort. It is believed that a "push-pull" notion is applicable to the relationship between the relative location of a cohort and its promotion chances. At a given rate of vacancies for the preceding cohort at the next higher grade position, the greater may be the ratio of the cohort to the preceding cohort in terms of size, the greater the force of pull generated by the vacancies. Thus, the prospects of promotion for the cohort may be more favorable. Also, if the relative size of the succeeding cohort at the next lower grade position is larger than that of a particular cohort, the force of push from the succeeding cohort might enhance the promotion chances for that particular cohort.

In addition, for the model it is necessary to satisfy the following conditions. First, all entry cohorts start their organizational careers at the bottom grade positions. Second, the career system is "closed" and there will be no lateral entry into the organization. Third, individuals placed in a cohort will not skip any grade positions throughout their career. Fourth, there will be no temporary lay-offs or work stoppage. Fifth, vacancies of positions are created through two different sources, voluntary and involuntary resignations. Sixth, there is a uniform mandatory retirement age which will be applied to all members of the organization.

Organizational Population

Members of an organization at a given point in time can be identified in two different ways: the cohort membership on the basis of entry date and the current position grade/rank. Let K denote the number of entry cohorts in an organization and $c_i(t)$ indicate the population stock in the i_{th} entry cohort at a specific point in time, t. Then. The whole set of cohorts in the organization would be expressed as a row vector:

$$C(t) = (c_1(t),\ c_2(t), \ldots\ldots\ldots\ldots\ldots, c_K(t)),$$

$$\text{where } C(t) = \sum_{i=1}^{K} c_i(t) \qquad (1)$$

Similarly, let L denote the number of grades, and $n_j(t)$ define the stock in the j_{th} grade position at time t. The set of grade positions in the organization will be:

$$N(t) = (n_1(t),\ n_2(t), \ldots\ldots\ldots\ldots\ldots, n_L(t)),$$

$$\text{where } N(t) = \sum_{j=1}^{L} n_j(t) \qquad (2)$$

The intermixed structure of cohort and grade demographic compositions in the bureaucratic organization will be represented in terms of cohort-specific grade compositions. Define $c_i\ (g,t)$ as the number of persons who entered the organization at the same time and

who hold the g_{th} grade at time t,

$$n_g(t) = \sum_i c_i(g, t) \tag{3}$$

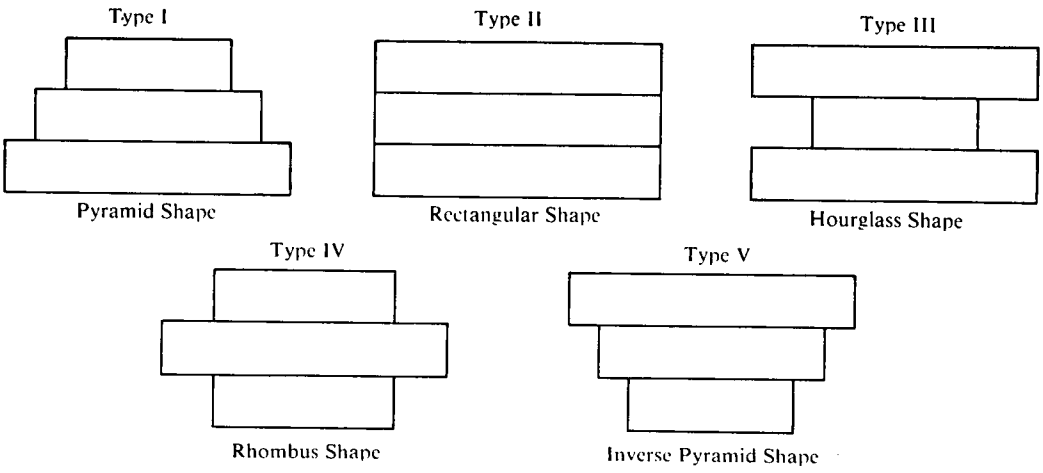
$$c_i(t) = \sum_g c_i(g, t) \tag{4}$$

$$N(t) = \sum_i \sum_g c_i(g, t) \tag{5}$$

The career flows in an organizational system can be classified by whether the incentives are drawn from their origins or their destinations. If the movement to a higher grade position is automatic as a result of new qualification relevant to the organizational decision-making process ragarding promotion, the movement can be called a push flow because it indicates the event occurring at the point of career origin. On the other hand, if an individual moves to a higher grade position because it is necessary to fill a vacancy occurring at that level, it is hypothesized that a particular cohort and its component individuals are pulled by the labor demand mechanisms.

Figure 1 presents a simplified version of three-tiered cohort demographic compositions in a bureaucratic organization. When it is assumed that the structure of grade positions is stable at a given point in time, the cohort demographic compositions will influence the distance of organizational career mobility across the level of grade positions in the organizations. Type I (pyramid shape) shows an ever increasing size of each entry cohort, while Type V (inverse pyramid shape) exhibits an ever decreasing size of each entering cohort. In Type I, the persons in the higher ordered cohort will be pushed by those lower cohorts; and vice versa in Type V. Type III (hourglass shape) indicates that the two neighboring cohorts are larger in size than the cohort placed between these two cohorts. It is expected that the small cohort will reap a large organizational reward. Type IV (rhombus shape) is an opposite case to Type III. Thus, the large cohort located between the two small cohorts will experience unfavorable conditions due to its sheer size. In Type II (rectangular shape), at a given attrition rate the bottom grade cohorts would have more favorable conditions for promotion than upper grade cohorts.

Figure I
Distribution Types of Three-Tiered Cohorts in Bureaucratic Organization



Measurement of Seniority

Two types of seniority status of an individual have been identified: 1) the length of service at the j_{th} grade position (time-in-grade) and 2) the total duration of service since entering the organization (time-in-service). Define a seniority status of an individual at the j_{th} grade position as s_j. The total duration of service by all members in an organization can be expressed by each set of intragrade years of service at a cross-sectional array. Mathematically, the total duration of service, l(s), is:

$$\begin{aligned} l(s) &= s_1 + s_2 + \cdots, + s_l \\ &= \sum_{j=1}^{L} s_j \end{aligned} \tag{6}$$

However, it is believed that generalized measurement of seniority status should be introduced to determine the cumulative career history for an entry cohort and its members. The weighted measurement of seniority status would overcome the shortcoming revealed in the previous simple measurement.

The number of persons observed at the midpoint of time interval between t and t + 1, or the person-years served at the g_{th} grade position during the time interval, $\bar{c}_i(g, t)$, will be expressed as:

$$\bar{c}_i(g, t) = [c_i(g, t) + c_i(g, t+1)]/2 \tag{7}$$

Equation (7) is an analogue of L_x value in the life table; i.e., the total years served in the given time interval by the entry cohort i in the grade position g.

It is assumed that from the standpoint of a bureaucratic organization the relative importance of an individual is directly associated with the grade position which he/she occupies in the organization. Furthermore, in the consideration of organizational career mobility for an entry cohort and its component individuals, the duration of service at the current grade position may be a more important determinant of promotion than the time spent at lower positions. In fact, controlling for the duration of service at different grade positions which an individual has occupied, the relative importance of each duration of service is expected to be directly correlated with the grade position—the higher the grade position, the greater the relative importance of the duration of service at the position. If this is the case, such differentials in the relative importance of each grade position in terms of its duration of service at that position should be reflected in the accounting procedure.

Since the salary level of each grade position may indicate the general value of the personnel at that position, the salary schedule can be used in determining the coefficient of grade weight. The coefficient can be obtained from the following:

$$w(g, t) = m(g, t)/m(1, t), \tag{8}$$

where m(g, t) denotes the base salary for the g_{th} grade position at time t, while m(1, t) indicates the base salary for the bottom position at time t.

By introducing w(g, t) to the person-years served at the grade position g it is possible to obtain a weighted measurement of seniority status for an entry cohort with the g_{th} position, $c_i(g, t)$. The "person-grade-years" served at the g_{th} position for the cohort at the t, $L_i(g, t)$, will be

$$L_i(g, t) = \bar{c}_i(g, t) \cdot w(g, t) \tag{9}$$

The total "person-grade-years" served for the entry cohort i in the grade g can be computed as an iterative application of $L_i(g, t)$ at different grade positions up to the time t since the cohort's entry into the organization. If $T_i(g, t)$ denotes the total "person-grade-years" served for the i_{th} cohort members in the g_{th} grade, the "person-grade-years" served for any cohort members in the grade g is

$$T.(g, t) = \sum_{i=1}^{K} T_i(g, t) \tag{10}$$

The total "person-grade-years" served for an organizational population in all grade positions, T. (., t), is

$$T.(., t) = \sum_{j=1}^{L} T.(j, t) \tag{11}$$

It is believed that $T_i(g, t)$ is an accurate measure of seniority status for $c_i(g, t)$, say, the entry cohort i in the grade position g at time t. It is superior to such a simple measurement as the duration of service at a certain position or for the organization, since $T_i(g, t)$ reflects the complete cumulative career history of the entry cohort from the time of entry to the time t.

The cohort distribution of "person-grade-years" served in a given grade is an important determinant of cohort promotion rate. In other words, the proportion of "person-grade-years" accumulated by a specific cohort in the total "person-grade-years" for all cohorts in the same grade will be equal to the proportion of promotion slots allocated for the cohort in the total number of promotions to next higher grade:

$$\pi_i(g, t) = T_i(g, t)/T.(g, t) = P_i(g \to g+1, t \to t+1)/P.(g \to g+1, t \to t+1), \tag{12}$$

where $P_i(g \to g+1, t \to t+1)$ is the number of promotions from grade g to $g+1$ allocated for cohort i during the time interval t to $t+1$, and $P.(g \to g+1, t \to t+1)$ denotes the total number of promotions from grade g to $g+1$ for all cohorts in grade g during the time interval t to $t+1$.

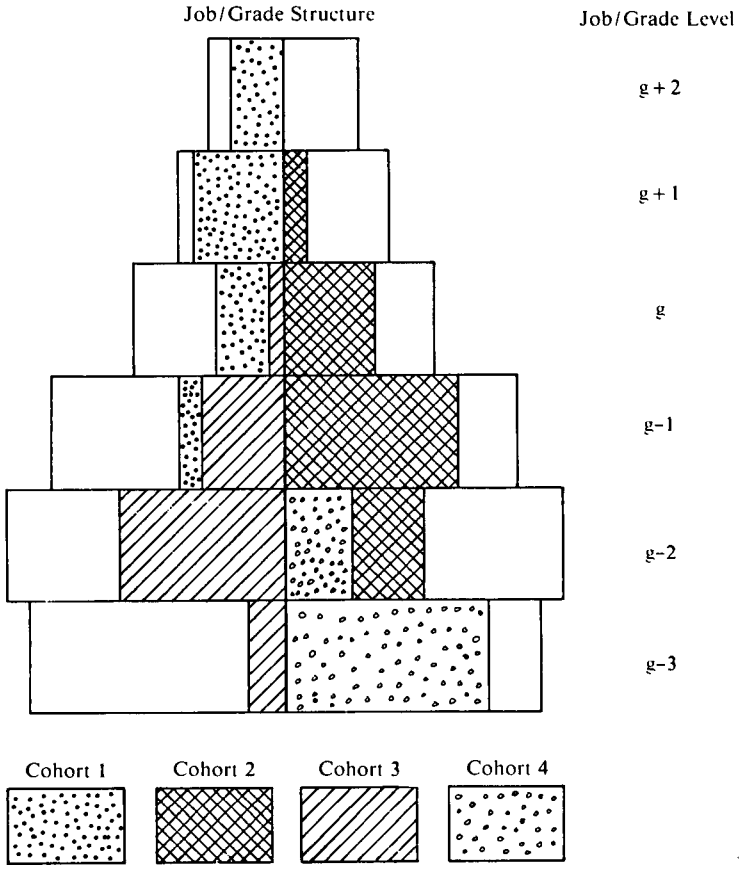
From 12) we can derive

$$T_i(g, t)/T_j(g, t) = P_i(g \to g+1, t \to t+1)/P_j(g \to g+1, t \to t+1) \tag{13}$$

Intragrade Measure of Relative Cohort Size

As indicated earlier, $T_i(g, t)$ takes into account not only the absolute size of a cohort but also the entire career history of the cohort since the entry to the organization, and thus it is an appropriate measure of the seniority status of the cohort. In addition, the "person-grade-years" served for a cohort $T_i(g, t)$ can be used in determining the relative cohort size for cohorts within a grade. It follows that $T_i(g, t)/T_j(g, t)$ is a more meaningful measure of relative cohort size than such a simple measure as $c_i(g, t)/c_j(g, t)$. Hence an intragrade measure of relative cohort size is essentially identical to the cohort's seniority status relative to other cohorts in the same grade level.

Figure II
Cohort Demographic Compositions at Job/Grade Positions in Bureaucratic Organization



Relative Placement

In general, the total number of persons placed in an entry cohort i, $c_i(., t)$, can be classified into two broad categories in reference to those members of the cohort in grade g at time t, $c_i(g, t)$: 1) those who have advanced to positions higher than grade g, $c_i(\check{g}, t)$, and 2) those in positions lower than grade g, $c_i(\hat{g}, t)$. In other terms,

$$c_i(\check{g}, t) = \sum_{j=g+1}^{L} c_i(j, t)$$

$$c_i(\hat{g}, t) = \sum_{j=1}^{g-1} c_i(j, t) \qquad (14)$$

In Figure II, $c_1(\check{g}, t) = c_1(g+1, t) + c_1(g+1, t)$, and
$c_1(\hat{g}, t) = c_1(g-1, t)$, for cohort 1, and
$c_2(\check{g}, t) = c_2(g+1, t)$ and
$c_2(\hat{g}, t) = c_2(g-1, t) + c_2(g-2, t)$, for cohort 2.

The size and placement of $c_i(g, t)$ relative to $c_i(., t)$ is believed to be an important factor affecting the organizational career mobility in the bureaucratic labor market. It is hypothesized that the promotion rates from g to g + 1 during the time interval of t to t + 1 is directly related to $c_i(\check{g}, t)$ while it is inversely correlated with $c_i(\hat{g}, t)$. The relative placement or dispersion of the cohort i in reference to the grade g, $\psi_i(g, t)$, is:

$$\psi_i(g, t) = \alpha_i(g, t) / \alpha.(g, t),$$
$$\text{where } \alpha_i(g, t) = c_i(g, t) \cdot c_i(\check{g}, t) / c_i(\hat{g}, t)$$
$$\alpha.(g, t) = \sum_{i=1}^{K} (g, t) \cdot c_i(g, t) / c_i(\hat{g}, t) \qquad (15)$$

Incorporating the propositions suggested above, the promotion available for individuals in the cohort i with the grade position g, $P_i(g \rightarrow g+1, t \rightarrow t+1)$, will be a joint function of $\pi_i(g, t)$, and $\psi_i(g, t)$. For the given number of vacancies at the g + 1 level,

$$P_i(g \rightarrow g+1, t \rightarrow t+1) = v(g+1, t) \cdot f[\pi_i(g, t), \psi_i(g, t)], \qquad (16)$$

where $v(g+1, t)$ is the number of vacancies in the grade g + 1 at time t.

Structural Source of Vacancies

Most bureaucratic organizations have regulations on the age of compulsory retirement. In Equation (6), it is assumed that the maximum duration of service for the organization, l(s), will be fixed. Those regulations which operate as essential conditions of organizational metabolism suggest that younger cohorts should replace the old cohorts in the organization. It is believed that the assumption of fixed maximum duration of service should be introduced to the baseline cohort model of career mobility within bureaucratic organization.

Organizational labor demand in the closed career system determines the initial size of each entering cohort at a given point in time. Fluctuations in cohort size would not determine the aggregate distribution of performances and characteristics for individuals placed in a particular cohort. As a usual means of assuring that temporal fluctuations in cohort size do not affect the potential distribution of endowment across each successive entering cohort, bureaucratic organizations are likely to routinize the recruitment process—every changing band of cohorts will pass a strict entrance examination. Recruitment rules, screening/signalling procedures, and predicted training costs within organizations should reduce variations in qualifications required for every cohort member. Some examples of this are found in the judiciary system of Japan, Korea, and other Asian countries. Many military organizations also fulfill these assumptions.

It is reasonable to hypothesize that these types of organizations would maximize the utilization of human endowment which a particular cohort possesses through its organizational life cycle. This hypothesis is in accordance with the assumption specifying the limitation of the cohort demographic model—a bureaucratic organization has a complete control over retirement and resignation through managerial planning. As a consequence, the source of vacancies can be specified by the expected amount of endowment allocated to individuals in a particular cohort and its relationship to an external/historical event which cuts across the cohort.

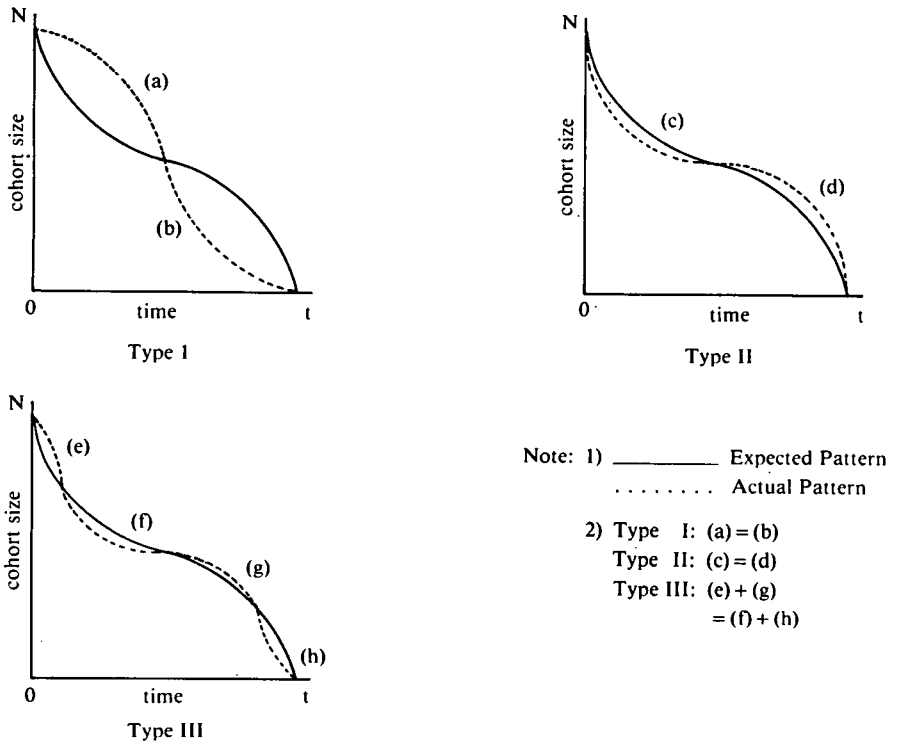
Actually, if the recruitment process is highly routinized or responds adequately to the relations between an organizational population and its task environment, the intercohort variations in the expected "person-grade-years" served for the organization would be negligible. In view of the organizational political economy the manager of the organization may even prefer to equalize the expected lifetime "person-grade-years" served for

different entry cohorts. If it can be assumed that 1) the aggregate distribution of endowment for every entering cohort would be equalized, and that 2) the organization maximizes the utilization of endowment allocated to every entering cohort at its time of entry, the following relationship can be formulated:

$$
\begin{aligned}
&e_1 = T_1(.,\infty)/c_1(1,0)\\
&e_2 = T_2(.,\infty)/c_2(1,0)\\
&\quad\vdots\\
&e_i = T_i(.,\infty)/c_i(1,0)\\
&\bar{e}. = e_1 = e_2 = e_3 = \ldots = e_i = \ldots e_n
\end{aligned}
\qquad (17)
$$

e. can be regarded as the organizational goal with regard to the expected lifetime cumulative career history for individuals placed in a particular cohort. In essence, the "compensatory" effect of earlier organizational careers on the subsequent mobility will be best illustrated in the organizational goal on $\bar{e}$. Figure III shows the balancing process of organizational personnel flows in the bureaucratic labor market. Type I indicates that given a total "person-grade-years" served, the higher the organizational career mobility at earlier stage, the lower subsequent mobility at later stages throughout the organizational

Figure III
Balancing Process of Organizational Population Flows in Bureaucratic Organization



life cycle of the cohort.

Type II is an opposite case of Type I—the lower the organizational career mobility at earlier stage, the higher the subsequent mobility. Type III exhibits no simple process of personnel flows across the ladder of grade positions within the organization, since the actual "person-grade-years" served for the organization draws an oscillated pattern around the expected "person-grade-years" served for the organization.

In such bureaucratic organizations as the types considered here where the balancing process of personnel flows is practiced systematically in relation to the organizational goal on $\bar{e}.$, the creation of vacancies will be a function of the discrepancies between the allocated "person-grade-years" served for a given unit of time on e. value and the actual cumulation of "person-grade-years" served during the time period. The total amount of expected lifetime "person-grade-years" served for cohort i would be:

$$\bar{e}. \cdot c_i(1, 0) = T_i^* \tag{18}$$

The remaining total "person-grade-years" for the cohort at time t would be:

$$\check{T}_i(g, t) = T_i^* - T_i(., t) \tag{19}$$

Assume that in the y_{th} year after their entering the organization the members of the i_{th} entering cohort reach the mandatory age of retirement. The remaining number of calendar years at time t, b, would be:

$$b = y - t \tag{20}$$

Then, the annual allocation of "person-grade-years" for the i_{th} entering cohort at the t_{th} year can be obtained from

$$\check{R}_i(., t) = \check{T}_i(., t)/b \tag{21}$$

Let $R_i(., t)$ denote the de facto annual "person-grade-years" served for the organization. Then, $R_i(., t)$ will be expressed as follows

$$R_i(., t) = T_i(., t+1) - T_i(., t) \tag{22}$$

In equation (22), $R_i(., t)$ is the difference of "person-grade-years" served for the i_{th} entering cohort between two time points $(t, t+1)$. If $\check{R}(., t) > R_i(., t)$, no exits of the cohort members during the time interval $(t, t+1)$ are expected. However, if $\check{R}_i(., t) < R_i(., t)$, then the expected deficit has to be converted into attritions. In other words,

$$[\check{R}_i(., t) - R_i(., t)]/[T_i(g, t)/T_i(., t)] = \phi_i(g, t), \tag{23}$$

where $\phi_i(g, t)$ indicates the amount of deficit in "person-grade-years" which have to be allocated to the cohort i in the grade g for the time interval of t to t + 1.

Therefore, the expected number of vacancies which must be created by cohort i in the grade g, $x_i(g, t)$, will be

$$x_i(g, t) = [\phi_i(g, t)]/[w(g, t)/\sum_{g}^{L} w(g, t)] \tag{24}$$

Also, the expected number of vacancies in grade g during the time interval of t to t + 1 will be

$$x.(g, t) = \sum_{i=1}^{K} x_i(g, t). \tag{25}$$

Discussion

The present study has considered a previously neglected unit of analysis, cohort, in research on organizations in explaining the differential distribution of organizational rewards. Specifically, it was argued that the seniority status of cohorts, intragrade cohort demographic composition, and the relative size and location of cohorts would determine the promotion chances for each cohort in an organization.

While previous studies have been limited to the analysis of the relations between individuals and bureaucratic organizations, this study has investigated the tripartite linkages between individuals and cohorts, cohorts and organization, and individuals and organization. The complex structure of organizational career system demonstrates that cohort as an intermixing configuration within the bureaucratic organization may control the progression of individuals' lifetime organizational careers throughout their demographic transformation. Cohort demographic compositions may operate as the principle of checks and balances with regard to career mobility.

Cohort analysis investigates the lagged effect of the input into personnel systems on the system output. This effect can be realized in processing both organizational reproduction and career mobility in most bureaucratic organizations. Thus, it is believed that the cohort model considered in the present study can explain the contextual aspects of organizational political economy, especially, in light of the relations between the organizational career systems and their ecological environments.

The compensation of the cohort lifetime career experience is assumed to balance the expected "person-grade-years" served for the cohort throughout its organizational life cycle. The compensation hypothesis delineates the amount of deviations from the expected distribution of behavioral patterns, such as the allocation of organizational rewards, for a particular cohort. Given that the bureaucratic organization has a greater commitment to its own internal stability and order than it has to rewarding individual's merit, the expected career life expectancy (e_i) might be constant across cohorts.

The cohort demographic model complements the career factors specified in such previous research as status-attainment and Markovian models. The cumulative career history of a cohort, intragrade cohort composition ("competition"), and the relative size and location of cohorts ("push-pull") are factors which represent a cohort morphology within the bureaucratic organization and may exercise an independent effect on mobility. A contextual interpretation may be offered when differences in the distribution of organizational rewards are examined in terms of cohort morphology rather than a set of individual measurements for personnel within the organization. It is desirable to incorporate both a set of individual measurements and cohort parameters in the analysis of career mobility.

As Glenn (1977:16) has noted, a cohort analysis should not be a "mechanical exercise." Although the required conditions for application of the present model are seemingly strict and unrealistic there exist numerous organizational settings which satisfy the conditions. For example, most of the military organizations have the career mobility structure as depicted in this paper. The career officers in the administrative and judiciary systems in

Korea, Japan, and other countries are also exposed to the mobility systems which fit to the postulates of the model. It should be pointed out that the stratification structure in these organizations is essentially closed—no lateral entries. Furthermore, the entry cohort membership (i.e., "commission cohort," "cohort based on passing the civil service and judiciary examinations," "cohort based on entry to banks, corporations, and business firms,") has long been regarded as an important determinant of the career mobility in organizations. It is hoped that future studies apply the proposed model to the mobility data in those organizations. We are currently using the model in our research on the promotion patterns of the U.S. Marine Corps officers over the past 40 years.

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